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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,952	04/13/2004	Michael J. Dougherty	25438	5454

28624 7590 04/05/2007  
WEYERHAEUSER COMPANY  
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EXAMINER
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CORDRAY, DENNIS R

ART UNIT	PAPER NUMBER
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1731

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/05/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/05/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@weyerhaeuser.com

## Office Action Summary

Application No.

10/823,952

Applicant(s)

DOUGHERTY ET AL.

Examiner

Dennis Cordray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/12/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's amendments, filed 10/17/2006, have overcome the objections to the Specification. Applicant's arguments and amendments have been fully considered but fail to overcome the previous rejections because they introduce new matter as detailed in the rejections below.

Also, due to the amendments, new grounds of rejection are made.

### ***Drawings***

The drawings were received on 10/17/2006. These drawings are accepted.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1, as amended, recites the negative limitation, "in the absence of other supporting particles," which limitation is unsupported in the Specification as filed. Nowhere in the Specification is a discussion presented that teaches a paper having calcium carbonate on the surface in the absence of other supporting particles. A recitation of a portion of MPEP 2173.05(i) follows:

2173.05(i) Negative Limitations Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) (“[the] specification, having described the whole, necessarily described the part remaining.”). See also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff’d mem.*, 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Claims 2-9 depend from thus inherit the limitations of Claim 1.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, as amended, recites the negative limitation, “in the absence of other supporting particles,” which limitation is not discussed in the Specification as filed. Neither the claim nor the Specification defines what is meant by “supporting particles.” Paper typically comprises cellulosic fibers, which are particles, and the fibers support the calcium carbonate. Paper typically comprises cellulosic fibers, which are particles,

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and the fibers support the calcium carbonate, thus supporting particles are present. Almost all of the embodiments recited in the Specification indicate application of the particles with a binder, such as starch, modified starch or synthetic polymers or copolymers (see p 3, lines 9-10 and Examples 1 and 4-9), which are often provided in the form of a dispersion of organic particles, thus providing supporting particles. Without a definition of what constitutes a supporting particle, the metes and bounds of the claimed subject matter are not clear.

Claims 2-9 depend from thus inherit the indefiniteness of Claim 1.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Dettling et al (6413591).

Dettling et al discloses a method of coating a paper with a composition comprising calcium carbonate without using a binder (Abs; col 7, lines 18-24). The particles are adhered to the web by hydrogen bonding forces. The coating contains fines, fibrils, fibers and/or pigments, thus can comprise essentially all calcium carbonate

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(col 3, lines 33-40). In any case, the other particles are not used as supports but as part of the coating material. A preferred pigment is precipitated calcium carbonate having a particle size from 40 nm to 2  $\mu\text{m}$  (col 6, lines 2-5), which overlays the claimed ranges. The coating weight is from 2 to 100% (40 to 2000 lb/ton) of the grammage of the web (col 3, lines 33-39). The coatings improve the quality of printing on the paper (col 5, line 67 to col 6, line 4).

Dettling et al discloses a base paper coated with 13-15  $\text{g/m}^2$  in the wet stage of a composition containing calcium carbonate having a particle size from 50 to 100 nm, which is within the claimed ranges. The wet coating composition has 60% solids content, thus the amount of solids applied is from 7.8 to 9  $\text{g/m}^2$  (col 7, lines 41-52). The instant Specification teaches in the background section that printing paper has a basis weight from 16 to 180 lb/3300  $\text{ft}^2$  (approx. 22 to 267  $\text{g/m}^2$ ). Using a paper with a basis weight of 200  $\text{g/m}^2$ , for example, the amount of coating used in the example of Dettling et al is from 3.9 to 4.5%, or from 78 to 90 lb/ton, which lies within the claimed ranges of application.

Dettling et al discloses that the coating particles are bound to the surface of the paper web, thus are on the surface (col 2, lines 7-10).

Claims 1-9 are rejected under 35 U.S.C. 102(a or e) as anticipated by Mason et al (WO 03/078734 A1).

Mason et al discloses paper sheets surface coated with a composition comprising calcium carbonate nanoparticles with particle sizes of from 5 to 500 nm,

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preferably from 10-100 nm, and more preferably from 15-50 nm. In some embodiments, the particle size can be from 10 to 200 nm (Abs; p 3, line 15 to p 4, line 5; p 4, lines 17-25). The nanoparticles are retained in the surface layer to give excellent printing properties (p 4, lines 1-5). Mason et al discloses that the coating also comprises a carrier fraction and that the ratio of nanoparticles to carrier fraction ranges from 5/95 to 95/5, based on dry matter (p 3, lines 15-30; p 4, lines 32-35). The amount of coating applied to the paper is 0.5 to 15 g/m<sup>2</sup> per side (0.34 to 10.2 lb/3300 ft<sup>2</sup>), based on dry matter (p 8, lines 23-26). Applicant recites in the prior art section of the instant Specification (p 2, lines 5-6) that printing paper has a basis weight of from 16 to 180 lb/3300 ft<sup>2</sup>. Using the minimum and maximum limits for the above disclosed composition, the calcium carbonate can be present on the paper from 0.18 to 1200 lb/ton of base paper per coated side. For example, paper having a basis weight of 130 lb/3300 ft<sup>2</sup> can have an amount of calcium carbonate from 0.26 to 148 lb/ton per coated side. The disclosed composition completely overlaps the claimed composition, thus anticipates it.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-9 of copending Application No. 11/155412. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: the instant claims and claims of the copending application are related as genus and species.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claims 1-9 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application Nos. 10/824221 and 11/155455 in view of Mason et al. The conflicting claims recite a paper with calcium carbonate on the surface thereof, the calcium carbonate having the same



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particle sizes as the instant application. The conflicting claims do not specify the amount of addition of calcium carbonate to the paper. However, as detailed in the above rejection under 25 U.S.C. 102, Mason et al discloses a paper coating having calcium carbonate with the same particle sizes as claimed in the instant application, and also discloses addition of the calcium carbonate to the paper in amounts that overlap the range claimed in the instant application. It would be obvious to one of ordinary skill in the art in view of Mason et al to apply the calcium carbonate to the paper in the claimed amount.

This is a provisional obviousness-type double patenting rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



DRC

  
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